WHAT IS CLAIMED IS:

1. An electrostatic attracting method in which a direct-current voltage is applied to an electrode disposed at a table formed of a dielectric material to attract/hold a substrate onto a holding surface of the table with an electrostatic force produced thereby, the method characterized by comprising:

a first step of applying a voltage having a predetermined polarity to the electrode to charge the holding surface with an electric charge having a polarity different from that applied to the electrode;

a second step of holding the substrate on the holding surface; and

a third step of applying a voltage having a polarity different from that applied in the first step to the electrode in a state in which the substrate is held on the holding surface to produce an electric charge having the same polarity as that charged on the holding surface in the first step at the holding surface of the table, and attracting/holding the substrate with the electric charge together with the electric charge charged on the holding surface in the first step.

2. The electrostatic attracting method according to claim 1, characterized in that the first step is carried out under a pressure atmosphere, and charged particles exist in the pressure atmosphere.

3. The electrostatic attracting method according to claim 2, characterized in that at least one of steam and oxygen exists in the pressure atmosphere.

4. The electrostatic attracting method according to claim 1, characterized in that the third step is carried out in a pressure atmosphere of 80 kPa or less.

5. The electrostatic attracting method according to claim 1, characterized by further comprising:

an earth step of grounding the electrode to discharge the electric charge accumulated in the electrode before applying the voltage to the electrode.

6. An electrostatic attracting apparatus which attracts/holds a substrate, characterized by comprising:

a table formed by a dielectric material and including a holding surface which holds the substrate by an electrostatic force;

an electrode disposed at the table;

a direct-current power supply which applies a direct-current voltage onto the electrode; and

switch means for switching a polarity of a direct-current voltage applied to the electrode by the direct-current power supply,

wherein after applying the direct-current voltage having a predetermined polarity to the electrode, the substrate is held on the holding surface, the switch means is operated to apply a direct-current

voltage having a different polarity to the electrode.

7. The electrostatic attracting apparatus according to claim 6, characterized in that the table is disposed in a chamber, and a pressure of an inner space of the chamber can be reduced by pressure reducing means.

8. The electrostatic attracting apparatus according to claim 6, characterized in that the chamber is connected to charged particle supply means for supplying charged particles to the inner space.

9. A bonding apparatus in which a fluid is disposed between two substrates to bond these substrates to each other by a sealing agent, the apparatus characterized by comprising:

a chamber in which a pressure of an inner space can be reduced;

a pair of tables which are disposed opposite to each other in the chamber and which include holding surfaces to hold the substrates on the surfaces disposed opposite to each other and at least one of which is formed of a dielectric material;

an electrode disposed at the table formed of the dielectric material;

a direct-current power supply which applies a direct-current voltage to the electrode and produces an electrostatic force to hold the substrate on the holding surface of the table;

switch means for switching a polarity of the direct-current voltage applied to the electrode by the direct-current power supply; and

driving means for driving the pair of tables with respect to each other in vertical and horizontal directions and positioning the substrates held on the holding surfaces of the pair of tables in the horizontal direction to bond the substrates to each other,

wherein after applying the direct-current voltage having a predetermined polarity to the electrode, the substrate is held on the holding surface, the switch means is operated to apply a direct-current voltage having a different polarity to the electrode.

10. The bonding apparatus according to claim 9, characterized by further comprising: an earth device which discharges electric charges accumulated in the electrode before applying the direct-current voltage having the different polarity to the electrode.

11. The bonding apparatus according to claim 9, characterized in that an open hole communicating with a gas introducing source is formed in the holding surface.